

AMENDMENT(S) TO THE CLAIMS

1. (currently amended) An optical fiber coupling unit comprising an optical fiber and a sleeve, ~~which the sleeve having~~ a planar surface adjacent to its circumferential surface and an end face, the sleeve being is arranged on an end portion of the optical fiber and ~~terminates with the end face terminating flush with the associated extreme~~ an end of the optical fiber, so that ~~on the one extreme end there is formed thereby forming a~~ continuous coupling face, ~~with which so that~~ the optical fiber coupling unit can be placed onto an optical waveguide component to establish an optical coupling.

2. (currently amended) The optical fiber coupling unit as ~~claimed in according to~~ claim 1, the optical fiber being ~~closely~~ surrounded by the sleeve, ~~in particular with a distance between~~ the optical fiber and the inner wall of the sleeve being about of 1-5 μm .

3. (currently amended) The optical fiber coupling unit as ~~claimed in according to~~ claim 1, wherein the optical fiber is ~~being~~ bonded to into the sleeve using an ~~by means of~~ adhesive.

4. (currently amended) The optical fiber coupling unit as ~~claimed in according to~~ claim 1, wherein the continuous coupling face extends at an angle of about 82 degrees with respect to a ~~the~~ longitudinal axis of the optical fiber.

5. (currently amended) The optical fiber coupling unit as ~~claimed in according to~~ claim 1, wherein the sleeve is made of a material ~~which has~~ having a coefficient of thermal expansion corresponding ~~approximately~~ to about that of the optical fiber.

6. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 1, wherein the sleeve is made of a material selected from the group of a glass and ~~or~~ a ceramic material.

7. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 1, wherein the sleeve ~~having~~ has an outside diameter ~~of at least~~ between about 2 mm and of at most about 10 mm.

8. (cancelled)

9. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim ~~8~~ 1, the planar surface extending up to the continuous coupling face.

10. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 1, the optical fiber ~~being provided with~~ having a sheathing, by which the optical fiber is surrounded, and the end portion of the optical fiber accommodated in the sleeve having a portion being freed of the sheathing removed.

11. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 10, the sleeve having extending with a sleeve portion remote from the ~~extreme~~ end of the optical fiber that surrounds a portion of the sheathing over the sheathing and preferably surrounding the sheathing closely, in particular with a distance between the sheathing and the inner wall of the sleeve being about ~~of~~ 1-5 μ m.

12. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 11, the sleeve being transversely

slit in its sleeve portion remote from the ~~one extreme~~ end of the optical fiber, thereby forming a slit space, with a portion of the optical fiber having with its sheathing being arranged in the slit space.

13. (currently amended) The optical fiber coupling unit as ~~claimed in~~ according to claim 10, the sleeve ~~being provided in two parts~~ comprising of an inner sleeve and an outer sleeve, the inner sleeve being arranged on the ~~exposed~~ end portion of the optical fiber, and the outer sleeve extending with a sleeve portion remote from the one extreme end of the optical fiber over a portion of the sheathing.

14. (currently amended) The optical fiber coupling unit as ~~claimed in~~ according to claim 13, the inner sleeve being bonded ~~by means of adhesive into to~~ the outer sleeve with an adhesive.

15. (currently amended) The optical fiber coupling unit as ~~claimed in~~ according to claim 13, the inner sleeve having about the same outside diameter as the sheathing.

16. (currently amended) The optical fiber coupling unit as ~~claimed in~~ according to claim 1, the sleeve having a length of at least about 2 mm.

17. (currently amended) An optical waveguide arrangement comprising an optical waveguide component, ~~in particular an optical chip,~~ said optical waveguide component having a placement face, from which an optical structure extends, and an optical fiber coupling unit, the optical fiber coupling unit comprising a sleeve with having an optical fiber attached thereto, the optical fiber coupling unit having a circumferential surface adjacent to a planar surface with a coupling face on an end portion, the

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optical fiber coupling unit which is being attached so that
~~placed with its coupling face is adjacent to against the~~
placement face of the optical waveguide component, thereby
establishing an optical coupling between the optical fiber and
the optical structure, ~~and is fastened on said placement face.~~

18. (cancelled)

19. (cancelled)

20. (cancelled)